

In the Claims

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Claims 1-68 are canceled.

69. [Previously Presented] A remote intelligent communication device comprising:

a ground plane;

an antenna spaced apart from and interacting with the ground plane, the antenna being substantially electrically insulated from the ground plane;

an integrated circuit coupled with the antenna, the integrated circuit including a receiver; and

an encapsulant configured to form a housing about the antenna and the integrated circuit, the encapsulant comprising an outermost planar surface of the housing.

70. [Previously Presented] The device according to claim 69 wherein the encapsulant encapsulates and contacts the antenna.

71. [Previously Presented] The device according to claim 69 wherein the integrated circuit includes a modulator configured to communicate using backscatter communications.

72. [Previously Presented] The device according to claim 69 further comprising a power source coupled with the integrated circuit and the ground plane.

73. [Previously Presented] The device according to claim 69 wherein the encapsulant encapsulates and contacts the integrated circuit.

74. [Previously Presented] The device according to claim 69 wherein the integrated circuit comprises radio frequency identification device communication circuitry.

75. [Previously Presented] A communication device comprising:  
an integrated circuit comprising transponder circuitry operable to communicate an identification signal using backscatter communications responsive to receiving a polling signal;

an antenna coupled with the transponder circuitry; and

a ground plane spaced from the antenna and configured to shield some electromagnetic signals from the antenna and reflect other electromagnetic signals towards the antenna, the ground plane being further configured to electrically couple with a terminal of a power source and provided at a voltage of the terminal.

76. [Previously Presented] The device according to claim 75 wherein the ground plane has a first side facing away from the antenna and configured to shield the some electromagnetic signals from the antenna, and a second side facing the antenna and configured to reflect the other electromagnetic signals towards the antenna.

77. [Previously Presented] The device according to claim 75 wherein the integrated circuit is configured to implement radio frequency identification device communications.

78. [Previously Presented] The device according to claim 75 further comprising the power source coupled with the integrated circuit.

79. [Previously Presented] A method of forming a remote intelligent communication device comprising:

providing a power source;  
forming a ground plane;  
forming an antenna spaced from the ground plane;  
conductively bonding an integrated circuit with the antenna; and  
electrically coupling the ground plane with the power source to electrically ground the ground plane.

80. [Previously Presented] The method of claim 79 further comprising conductively bonding the integrated circuit with the ground plane.

81. [Previously Presented] The method of claim 79 further comprising forming a housing to encapsulate and contact the antenna and the integrated circuit.

82. [Previously Presented] The method of claim 79 wherein the conductively bonding comprises conductively bonding the integrated circuit configured to implement backscatter communications.

83. [Previously Presented] A method of forming a remote intelligent communication device comprising:

forming a ground plane;  
printing an antenna over the ground plane in a substantially electrically insulated relationship with respect to the ground plane;  
forming a housing to encapsulate and contact the antenna; and  
electrically coupling an integrated circuit with the antenna.

84. [Previously Presented] The method of claim 83 further comprising providing a dielectric layer intermediate the ground plane and antenna.

85. [Previously Presented] The method of claim 84 further comprising printing at least one conductive connection through the dielectric layer while printing the antenna.

86. [Previously Presented] The method of claim 84 wherein the forming the housing comprises forming the housing to contact a portion of the dielectric layer.

87. [Previously Presented] The method of claim 83 wherein the electrically coupling comprises electrically coupling the integrated circuit configured to implement backscatter communications.

88. [Previously Presented] A method of forming a radio frequency identification device comprising:

providing a conductive layer;  
forming an antenna over the conductive layer;  
providing an integrated circuit configured to communicate using radio frequency identification device communications over the conductive layer;  
electrically coupling the integrated circuit with the antenna; and  
providing an encapsulant to form the device comprising a substantially void-free mass.

89. [Previously Presented] The method of claim 88 further comprising grounding the conductive layer.

90. [Previously Presented] The method of claim 88 wherein the encapsulating comprises:

flowing a flowable encapsulant over the antenna and integrated circuit; and  
curing the encapsulant.

91. [Previously Presented] The method of claim 79 wherein the antenna comprises a trace of electrically conductive ink.

92. [Previously Presented] The method of claim 83 wherein the printing the antenna comprises printing a trace of electrically conductive ink.

93. [New] The method of claim 90 wherein the flowing the flowable encapsulant comprises flowing the flowable encapsulant over an entirety of the antenna.

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